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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,285	07/25/2003	Masanobu Oshima	Kinoshita C-218A	2381
23474	7590	10/07/2005	EXAMINER	
FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			PATTERSON, MARC A	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/627,285

Applicant(s)

OSHIMA ET AL.

Examiner

Marc A. Patterson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/14/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **WITHDRAWN REJECTIONS**

1. The 35 U.S.C. 103(a) rejection of Claims 1 – 2, 4 – 8, and 10 – 16 as being unpatentable over Tanaka et al (U.S. Patent No. 5,700,091) in view of Benoit et al (U.S. Patent No. 4,747,815) and Akao (U.S. Patent No. 5,017,429) and Lang et al (U.S. Patent No. 5,091,241) and Akao et al (U.S. Patent No. 4,906,517), of record on page 2 of the previous Action, is withdrawn.
2. The 35 U.S.C. 103(a) rejection of Claims 3 and 9 as being unpatentable over Tanaka et al (U.S. Patent No. 5,700,091) in view of Benoit et al (U.S. Patent No. 4,747, 815) and Akao (U.S. Patent No. 5,017,429) and Lang et al (U.S. Patent No. 5,091,241) and Akao et al (U.S. Patent No. 4,906,517) and further in view of Ito et al (U.S. Patent No. 4,623,587), of record on page 9 of the previous Action, is withdrawn.

### **NEW REJECTIONS**

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 2, 4 – 8, and 10 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (U.S. Patent No. 5,700,091) in view of Benoit et al (U.S. Patent No. 4,747, 815) and Akao (U.S. Patent No. 5,017,429) and Lang et al (U.S. Patent No.

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5,091,241) and Akao et al (U.S. Patent No. 4,906,517) and Asakura et al (U.S. Patent No. 4,360,550).

With regard to Claim 1, Tanaka et al disclose a bag (column 4, line 54) comprising a first film comprising a linear low density polyethylene ('27' in Figure 1; column 5, lines 14 - 16) and a second film comprising a biaxially oriented film comprising 70% nylon 6 ('26' in Figure 1; column 5, lines 16 - 20); the films comprise a base portion of the bag (column 5, lines 24 - 25) which is fused onto a bag body (column 4, lines 16 - 17) and therefore also comprise a bag body as each layer is a body within the bag; linear low density polyethylene is disclosed as a sealant material of the bag (column 5, lines 40 - 41) and the first film is therefore a sealant layer; the nylon film covers the sealant layer and is an outer layer of the sealant film (the nylon film is on the opposite side of the linear low density polyethylene film from a snapping portion '16' shown in Figure 1; column 5, lines 28 - 32); with regard to the first film comprising more than 50% by weight linear low density polyethylene, Tanaka et al teach that the sealing material of the bag is either linear low density polyethylene or polypropylene (L-LDPE, PP; column 2, lines 13 - 15); Tanaka et al therefore discloses a film that comprises entirely linear low density polyethylene or comprises entirely polypropylene, and therefore discloses a film that comprises more than 50% by weight linear low density polyethylene; a third film is laminated on a portion of outer surfaces of the bag body (layer '25', laminated to the outside of the nylon film '26' as shown in Figure 1; column 5, lines 24 - 27) which comprises a polyethylene (linear low density polyethylene; column 5, lines 16 - 17); the bag therefore comprises the combination of the bag body and the third resin film; with regard to the claimed aspect of the nylon film being biaxially drawn at a ratio of not less than 2.8 in the machine direction and transverse direction, the film is biaxially

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drawn at a ratio of not less than 2.8 in the machine direction and transverse direction (column 5, lines 11 – 23); however, the method of stretching the film is given little patentable weight, because Tanaka et al disclose a biaxially oriented nylon film as discussed above; Tanaka et al fail to disclose a bag which is self - standing and linear low density polyethylene that comprises a copolymer of ethylene and 1 - butene and a third resin that is uniaxially drawn and a first film having a thickness that is 80 to 150  $\mu\text{m}$ .

Benoit et al teaches that linear low density polyethylenes are copolymers of ethylene and another olefin (column 4, lines 21 - 30); the property of comprising copolymers of ethylene and all other olefins, including butene, is therefore disclosed by Tanaka et al.

Akao teach that a self - standing bag and a non - self standing bag are interchangeable as bags (column 13, lines 26 - 30) for the purpose of obtaining a bag that is heat sealed (column 13, lines 26 – 30). One of ordinary skill in the art would therefore have recognized the advantage of providing for the self - standing ability of Akao in Tanaka et al, which is a bag, depending on the desired sealability of the end product.

Lang et al teaches a film (column 3, lines 65 - 66) for a bag (pouch; column 4, lines 21 - 22) that is uniaxially drawn (oriented in the machine direction, by drawing at a draw ratio, therefore drawing along a single axis, therefore uniaxially drawn; column 3, lines 65 - 68) for the purpose of using a film having a minimum tear strength in the uniaxial direction (Elmendorf tear of at least 2 g/ $\mu\text{m}$  in the machine direction; column 4, lines 30 - 31). One of ordinary skill in the art would therefore recognize the advantage of providing for the uniaxially drawn film of Lang et al in Tanaka et al, which is a bag comprising a film, depending on the desired tear strength in the uniaxial direction of the end product.

Akao et al teach a splitting notch (notch for tearing; column 25, lines 34 - 38) in a bag (column 25, line 31) for the purpose of obtaining directional tearing (tearing in the longitudinal direction; column 25, lines 34 - 38). One of ordinary skill in the art would therefore have recognized the advantage of providing for the splitting notch of Akao et al through all of the films of Tanaka et al, therefore formed on the outside of the bag body, depending on the desired tearing direction of the end product.

Asakura et al teach a sealant layer (column 5, line 25) for a bag (column 5, lines 36 - 37) having a thickness of 80 to 150  $\mu\text{m}$  (10 to 150 microns; column 5, lines 45 - 49) for the purpose of obtaining a layer that has a satisfactory sealing effect (column 5, lines 45 - 49). One of ordinary skill in the art would therefore have recognized the advantage of providing for the thickness of Asakura et al in Tanaka et al, which first film which is a sealant layer, depending on the desired sealing effect of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for self - standing ability in Tanaka et al in order to obtain a bag that is heat sealable as taught by Akao and to have provided for uniaxially drawn film in Tanaka et al in order to obtain a bag having a minimum tear strength in the uniaxial direction as taught by Lang et al and to have provided for a splitting notch in Tanaka et al in order to obtain a bag having directional tearing as taught by Akao et al and to have provided for a first film having a thickness of 80 to 150  $\mu\text{m}$  in Tanaka et al in order to obtain a bag having a satisfactory sealing effect as taught by Akao et al.

With regard to Claim 2, a biaxially drawn polyethylene terephthalate film is laminated between the linear low density polyethylene film and outer layer disclosed by Tanaka et al (column 2, lines 24 - 30).

With regard to Claims 4 and 10, the nylon film disclosed by Tanaka et al contains 55 to 85% by weight nylon 6 and 15 to 45% by weight metaxylylene adipamide (column 3, lines 13 - 20).

With regard to Claim 5, Tanaka et al fail to disclose a first film that comprises linear low density polyethylene and low density polyethylene.

Benoit et al teach that it is interchangeable to use linear low density polyethylene, low density polyethylene, and a mixture of linear low density polyethylene and low density polyethylene (column 4, lines 21 - 29) for the purpose of obtaining a film that is usable at any thickness (column 4, lines 30 - 32). One of ordinary skill in the art would therefore recognize the advantage of providing for the mixture of linear low density polyethylene and low density polyethylene of Benoit et al in Tanaka et al, depending on the desired usability at any thickness of the end product. It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a mixture of linear low density polyethylene and low density polyethylene in Tanaka et al in order to obtain a film that is usable at any thickness as taught by Benoit et al.

With regard to Claim 6, as stated above, Tanaka et al disclose a bag body (column 4, lines 16 - 17), comprising a laminated film comprising a linear low density polyethylene film which is a sealant (column 5, lines 42 - 43) and a biaxially oriented nylon outer film (column 5, lines 35 - 40); the bag is made from two sheets of the film (two films having two layers, labeled

'14' in Figure 2; column 5, lines 11 - 15) by sealing the films using a seal bar (column 4, lines 66 - 67) about a periphery thereof (the seal portion '39' covers the periphery of the bag, as shown in Figure 3; column 5, lines 33 - 35); the bag body is therefore sealed and comprises sheets of the laminated film sealed about a periphery thereof and having an open space therebetween forming an interior of the bag body, the sealant layer of one sheet being disposed inwardly and facing the sealant layer of the other sheet, the outer layers of the sheets facing outwardly to form outer surfaces of the bag body; the nylon film is a multilayer film (column 3, lines 26 - 27), and first and second resin layer films, of nylon, are therefore laminated onto the opposing outer surfaces of the bag body and extending in all directions across the entirety of the bag body; the bag comprises other layers which laminated to the bag body (band - like base portion fused to the bag body; column 4, lines 16 - 19) and are therefore also a portion of the bag body, so that a portion of the bag body is disposed therebetween; the split guide is therefore formed by the bag body, and the resin films combine with the portion of the bag body disposed therebetween to form a split guide extending across the bag body; the notch taught by Lang et al therefore extends in a direction transverse to the first direction, enabling tearing of the first and second resin films and the bag body across the first direction to open the bag body. However, the claimed aspect of the film extending in a direction transverse to the first direction, enabling tearing of the first and second resin films and the bag body across the first direction to open the bag body is directed to a functional use of the invention, rather than its structure, and is therefore given little patentable weight.



With regard to Claim 7, the first and second resin films are laminated onto the sealed films, as discussed above, and are therefore parallel to each other and symmetric with respect to the bag body.

With regard to Claim 8, Tanaka et al disclose that nylon and polypropylene are used interchangeably as materials of the biaxially oriented film (column 2, lines 24 - 27); the first and second resin films therefore comprise polypropylene.

With regard to Claims 11 – 12, the linear low density polyethylene comprises a copolymer of ethylene and 1 – butane and comprises low density polyethylene as discussed above.

With regard to Claims 13 – 14, Tanaka et al disclose first and second resin films having a width of 20 mm (column 5, line 27). Tanaka et al fail to disclose a sealant layer having a thickness of 80 to 150  $\mu\text{m}$  and first and second resin films having a thickness of 40 to 100  $\mu\text{m}$ . However, Tanaka et al teach first and second resin films having a thickness of 15  $\mu\text{m}$  (column 5, line 38) and teach the selection of a thickness of the film that is extrudable (the film is a coextrusion film; column 5, lines 11 – 15). Therefore one of ordinary skill in the art would have recognized the utility of varying the thickness of the film to obtain a desired extrudability. Therefore, the extrudability would be readily determined through routine optimization of thickness by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the thickness in order to obtain a desired extrudability, since the extrudability would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Tanaka et al.

With regard to Claim 15, Tanaka et al disclose that nylon and polyethylene terephthalate are used interchangeably as materials of the biaxially oriented film (column 2, lines 24 - 27); the laminated film therefore comprises the sealant layer, the outer layer and a biaxially drawn polyethylene terephthalate layer, the outer layer being positioned between the polyethylene terephthalate layer and the sealant layer, outer surfaces of the terephthalate layer forming outer surfaces of the bag body.

With regard to Claim 16, the first and second resin films are biaxially oriented as discussed above, and therefore comprise a crystalline area arrayed in the first direction; with regard to the claimed aspect of the crystalline area being obtained by uniaxial drawing of the first and second films, the structural limitations of the claims fall within the limitations of Tanaka et al as discussed above, because Tanaka et al disclose a crystalline area. The method of making the crystalline area is given little patentable weight; with regard to the claimed aspect of the drawing of the resin films enabling tearing of the split guide in only the first direction, the claimed aspect is directed to a functional use of the invention, rather than a structural limitation, and is therefore given little patentable weight.

With regard to Claim 17, the split guide extending across the bag body is band shaped (band – like portion which is bonded to the snapping portion; column 4, lines 16 – 19).

With regard to Claim 18, the seal about the periphery of the sheets of the laminated film extend about the entire periphery of the bag body (column 5, lines 43 – 45; Figure 3).

5. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (U.S. Patent No. 5,700,091) in view of Benoit et al (U.S. Patent No. 4,747, 815) and Akao

(U.S. Patent No. 5,017,429) and Lang et al (U.S. Patent No. 5,091,241) and Akao et al (U.S. Patent No. 4,906,517) and Asakura et al (U.S. Patent No. 4,360,550) and further in view of Ito et al (U.S. Patent No. 4,623,587).

Tanaka et al, Benoit et al, Akao, Lang et al, Akao et al and Asakura et al disclose a bag comprising two laminated resin films as discussed above. With regard to Claims 3 and 9, Tanaka et al, Benoit et al, Akao, Lang et al, Akao et al and Asakura et al fail to disclose two films having a bonding strength of not less than 5 g/mm.

Ito et al teaches a bag (column 6, lines 3 – 10) comprising laminated films having a bonding strength of greater than 5 g/mm (1800 g/15 mm; column 9, lines 20 - 25) for the purpose of making a laminate which does not peel (column 9, lines 20 - 25).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for films having a bonding strength of not less than 5 g/mm in Tanaka et al, Benoit et al, Akao, Lang et al, Akao et al and Asakura et al in order to make a laminate which does not peel as taught by Ito et al.

#### ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments with regard to the 35 U.S.C. 103(a) rejection of Claims 1 – 2, 4 – 8, and 10 – 16 as being unpatentable over Tanaka et al (U.S. Patent No. 5,700,091) in view of Benoit et al (U.S. Patent No. 4,747, 815) and Akao (U.S. Patent No. 5,017,429) and Lang et al (U.S. Patent No. 5,091,241) and Akao et al (U.S. Patent No. 4,906,517) and Asakura et al (U.S. Patent No. 4,360,550) and 35 U.S.C. 103(a) rejection of Claims 3 and 9 as being unpatentable over Tanaka et al (U.S. Patent No. 5,700,091) in view of Benoit et al (U.S. Patent No. 4,747,

815) and Akao (U.S. Patent No. 5,017,429) and Lang et al (U.S. Patent No. 5,091,241) and Akao et al (U.S. Patent No. 4,906,517) and Asakura et al (U.S. Patent No. 4,360,550) and further in view of Ito et al (U.S. Patent No. 4,623,587), have been considered and have been found to be persuasive with regard to the limitation of thickness. The rejections have therefore been withdrawn. The new rejections above are directed to Claims 1 – 16. With regard to the citations of Benoit et al, Akao, Lang et al and Akao et al, Applicant's arguments have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 6 of the remarks dated July 14, 2005, that the rejection in view of Akao is improper because although Akao teaches that a self – standing bag and a bag which is not self – standing are equivalent for purposes of storing film, there is no disclosure of the bags being equivalent for any other purpose.

However, because Akao teaches that a self – standing bag and a bag which is not self standing are equivalent for storing film, it is unclear why the two bags are not equivalent for storing other items, particularly in view of the fact that intended use of the bag, and therefore the item to be stored, is given little patentable weight.

Applicant also argues, on page 8, that the rejection in view of Tanaka et al is improper because Tanaka et al discloses a bag which is resealable, whereas the bag disclosed by Lang et al is intended to be tearable.

However, the term 'resealable' does not appear in Tanaka et al; furthermore, it is unclear why of Tanaka et al, which is re – closeable by virtue of having a snap fastener, teaches against the use of a tearable opening.

Applicant also argues on page 8 that there is no motivation to increase the thickness of Tanaka et al to obtain a self – standing bag.

However, a thickness which enables a bag to be self – standing is not claimed.

Applicant also argues, on page 9, that the third resin film disclosed by Tanaka et al is not located on an outer surface of a bag body; the film, Applicant argues, is located on an inner surface of a bag body.

However, as stated above, each layer of the laminated film is a body of the bag, and is therefore a bag body, because it is contained within the bag; the third film disclosed by Tanaka et al is therefore laminated on an outer surface of the bag body.

Applicant also argues on page 9 that an intermediate layer within a bag body cannot properly be considered a third resin film on an outer surface of a bag body.

However, as stated above, each layer of the laminated film is a body of the bag, and is therefore a bag body, because it is contained within the bag; the third film disclosed by Tanaka et al is therefore laminated on an outer surface of the bag body.

Applicant also argues, on page 9, that one of ordinary skill in the art would not modify Tanaka et al with a uniaxially drawn third resin film because Tanaka et al is not intended to be torn.

However, as stated above, it is unclear why of Tanaka et al, which is re – closeable by virtue of having a snap fastener, teaches against the use of a tearable opening.

Applicant also argues, on page 11, that the nylon film disclosed by Tanaka et al cannot be a split guide because it covers the entirety of the bag.

However, as stated above, because the bag disclosed by Tanaka et al comprises a snap fastener, the bag comprises a means of splitting the bag and therefore the layers of the bag which are adjacent to the means of splitting the bag comprise a split guide.

Applicant also argues on page 12 that the limitation of the claimed notch enabling tearing is applicable to patentable weight.

However, because the tearing of the bag is an intended use of the notch, rather than a further definition of the notch, the tearing of the bag is given little patentable weight; furthermore, as stated above, the enabling of tearing is taught by Lang et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson 10/3/05*

Marc A. Patterson, PhD.  
Examiner  
Art Unit 1772